

SIMULATION HELISIM

CREATE. SET. HOVER

- \ **HelisIM** is the industry-leading high-end COTS for creating high-fidelity, high-quality flight dynamics simulations for virtually any rotary-wing aircraft in the world - military, commercial, or unmanned.



PRESAGIS
MAKE IT REAL

At the core of HeliSIM's distinguished performance lies the real-time flexible blades and gearbox physics simulation. HeliSIM delivers these complex physics through highly optimized processing to simulate a large number of "blade elements" in real time to a produce high-fidelity simulation.

This optimized Blade Element Rotary Model (BERM) computation technique has allowed HeliSIM to become the market leading COTS rotary wing simulation software, leaving the competitions' "rigid disk" or other less advanced physics models, far behind when it comes to simulating the intricate physics of an helicopter, especially while in hovering mode.

BENEFITS



WIDE CHOICES OF ENGINES

Choose from turboshaft, piston, electrical, or other user-defined performance engines.



SYSTEMS AND SUB-SYSTEMS

Aerodynamics, Weight and Balance, Undercarriage, Hydraulic and Electrical systems, Navigation Systems, Flight Controls, Weather and more.



QUICK AIRCRAFT CUSTOMIZATION

Lets you easily change flight models or parameters or swap out aircraft.



RAPID INTEGRATION

Can connect to any flight simulation framework out-of-the-box through CIGI, HLA, DIS, local shared memory, or networked shared memory.



FLEXIBLE

Create high-fidelity models of virtually any rotary-wing aircraft with either rigid or flexible blades, single or multiple rotors, UAVs, combat or attack helicopters.

WHY HELISIM?

From developing flight training devices through building avionics test beds for existing or future rotary wing platforms, HeliSIM offers developers high-fidelity real-time simulation, easy customization, and rapid integration into a given simulation framework.

HeliSIM lets simulation developers easily conceive and quickly deploy a complete aerodynamic model for the real-time simulation of virtually any rotary-wing aircraft - military, civilian, and unmanned.

With a highly-flexible and customizable user interface, HeliSIM lets you use forms to define all the parameters of the flight model, engine model, blade tilt, atmospheric model, and defined flight paths.

You can also specify system and sub-system behaviors, such as Automatic Flight Control systems, as well as environmental conditions, and ground interactions.

Maximize HeliSIM by easily integrating virtual and/or real hardware devices and user-development simulation models. Also, out-of-the-box connection through CIGI, HLA, DIS, local shared memory, or networked shared memory to any flight simulation framework permits unparalleled interoperability and integration.



